WHAT IS CLAIMED IS:

1. A photoelectric encoder for detecting a movement amount of an object comprising:

a scale that generates a periodical light-intensity distribution pattern having a predetermined pitch P with irradiation of emission light from a light source; and

a plurality of light-receiving segment groups that are shifted relative to said scale to generate phase signals having predetermined phase differences so that the movement amount is detected based on the phase signals with the predetermined phase differences,

wherein a plurality of light receiving segments are positioned to have the same phase to form each of said plurality of light-receiving segment groups, which includes at least two of said plurality of light receiving segments adjacent to each other.

2. The photoelectric encoder according to claim 1, wherein said light-receiving segment groups have predetermined phase differences, and area centers of gravity on a phase axis of said plurality of the light-receiving segment groups having a predetermined relationship in phase difference to each other are made coincident with each other.

3. The photoelectric encoder according to claim 1, wherein said light-receiving segment groups have predetermined phase differences, and area centers of gravity on a phase axis of said plurality of the light-receiving segment groups having a predetermined relationship in phase difference to each other are arranged symmetrically in position with respect to a center axis of the emission light distribution pattern.

4. The photoelectric encoder according to claim 1, wherein a center distance between the center positions of the adjacent light-receiving segments having the same phase is equal to the pitch P, and a center distance between the center positions of the adjacent light-receiving segments located at the respective ends of different light-emitting segment groups having different phases is equal to 5P/4.

5. The photoelectric encoder according to claim 1, wherein in said light-receiving segment groups, a cross-talk preventive portion is integrally formed in the spaces between the respective adjacent light-receiving segments.

6. The photoelectric encoder according to claim 5, wherein said cross-talk preventive portion is formed of a vapor-deposition film member.

7. The photoelectric encoder according to claim 5, wherein said cross-talk preventive portion is formed of a signal-light shielding member by etching.

8. The photoelectric encoder according to claim 1, wherein the number of said light-receiving segment groups are four that respectively correspond to generate four phase signals, and when using one of the four phases as a reference phase, the phases of the other three signals are set to 90°, 180° and 270°.

9. The photoelectric encoder according to claim 1, wherein a width of each light-receiving segment is set to approximately 1/2 of the predetermined pitch P.